

# **Heart Disease Risk Factors & Prevention**



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## **Heart Disease Risk Factors and Prevention**

Heart disease is the largest epidemic in the United States today with the earned title of “Number One Killer” of the American society. About 700,000 deaths are attributed to heart disease each year. According to the National Institute for Health, 23 million (non-institutionalized) adults are diagnosed with heart disease annually. In addition, about 85% of those who develop symptoms of heart disease have at least one of the risk factors for the disease that are discussed in this packet.

Heart disease is referred to as an “ageless” disease affecting anyone at any time in his or her life. Heart disease can develop as early as the teen years and continue to worsen over time if prevention is not practiced. Hence, it is important to understand the risk factors and prevention methods for heart disease. Below are some controllable risk factors for heart disease to become aware of in order to maintain a healthy lifestyle:

### **Controllable Risk Factors for Heart Disease**

- Physically Inactive
- Overweight
- Smoking
- High blood pressure
- Type II Diabetes
- High total cholesterol (over 200) and LDL (over 160)
- Low High Density Lipoproteins (HDL) (under 40)

### **Uncontrollable Risk Factors**

- Family History
- Over 55 years of age

## **Taking Control**

The first step to preventing heart disease is to become aware of the disease and its risk factors. With the above risk factors in mind, observe the prevention methods below and compare these suggestions to your current lifestyle. Make the necessary adjustments to your health habits in order to fight the number one battle of heart disease before it takes control over you and your health.

### **What Is Cholesterol**

According to the American Heart Association, cholesterol is a soft, fat-like, waxy substance found in the bloodstream and in all your body's cells. It's normal to have cholesterol. It's an important part of a healthy body because it's used for

producing cell membranes and some hormones, and serves other needed bodily functions. But too high a level of cholesterol in the blood is a major risk for coronary heart disease, which leads to heart attack. You get cholesterol in two ways. Your body makes some of it, and the rest comes from cholesterol in animal products that you eat, such as meats, poultry, fish, eggs, butter, cheese and whole milk. Foods with saturated fats and foods that don't contain animal products may contain trans-fats, which cause your body to make more cholesterol.

### **Cholesterol Terms**

In order to take control of cholesterol levels, it is helpful to understand the terms associated with cholesterol measurement.

1. *Total Cholesterol*: Is a combination of LDL cholesterol and HDL cholesterol levels. Total cholesterol should be less than 200 mg/dL.
2. *Low Density Lipoproteins (LDL)*: "Bad Cholesterol." Most cholesterol is LDL cholesterol. LDL cholesterol is more likely to clog the arteries and keep blood from flowing through the body the way it should. The lower the LDL levels the better; one's LDL should be less than 130 mg/dL.
3. *High Density Lipoproteins (HDL)*: "Good Cholesterol." HDL cholesterol makes up only about ¼ of the blood's total cholesterol. HDL cholesterol carries cholesterol back to the liver, where it can be processed and sent out of the body. The higher your HDL cholesterol the better. HDL should be over 45 mg/dL.
4. *Triglycerides*: Triglyceride is the main type of fat transported by your body. Triglycerides are a normal component in your bloodstream. After you eat, your body digests the fats in your food and releases triglycerides into your bloodstream. They are transported throughout your body to give you energy or to be stored as fat. People with high triglycerides often have high total cholesterol levels. Many people with heart disease, diabetes and/or obesity also tend to have high triglyceride levels. Triglyceride levels should be less than 150 mg/dL.

### **Defining Fats and Their Sources (provided by American Heart Association)**

#### **1. Saturated Fats**

Intake of saturated fats, provided mostly by animals and some plants, is the main dietary cause for high blood-cholesterol levels.

- Animal sources of saturated fats: beef, beef fat, veal, lamb, pork, lard, poultry fat, butter, cream, milk, cheeses and other dairy products made from whole milk
- Plant sources of saturated fats: coconut oil, palm oil and palm kernel oil (or tropical oils) and cocoa butter.

## **2. Unsaturated Fats**

There are two types of unsaturated fats - polyunsaturated and monounsaturated fats - which are primarily found in oils from plants. These fats, when used in place of saturated fats, may help lower your blood cholesterol levels. However, these fats should still be used sparingly as all fats should.

- Polyunsaturated: safflower, sesame and sunflower seeds, corn and soybeans, many nuts and seeds, and their oils
- Monounsaturated: canola, olive and peanut oils and avocados.

## **3. Trans fatty acids (TFA's)**

"TFA's" are formed when fat products (i.e. polyunsaturated oils) are hydrogenated and turned to solids in order to give foods shelf life. TFA's are found in beef, pork, lamb and the butterfat in butter and milk as well as other canned or packaged products to increase shelf life.

These fats raise the blood cholesterol level and tend to have worse effects than saturated fats. TFA's can raise the LDL (bad cholesterol) levels while lowering the HDL (good cholesterol) levels.

## **4. Hydrogenated Fats**

Foods that are processed many times have fats which may have to go through a hydrogenation chemical process. These fats are dangerous to consume because they contribute to an increase of blood cholesterol levels. Examples of products with hydrogenated fat are margarine and shortening.

## **Ways to Prevent Heart Disease**

- **Eat "heart healthy"**

Choose and prepare foods low in saturated fat and cholesterol and consume little or no-trans fat items

1. Less than 7% of calories should come from saturated fats
2. Diet should consist of less than 200 mg of dietary cholesterol

- **Limit salt and sodium intake in order to lower blood pressure**

- **Increase intake of soluble fiber in combination with cholesterol-lowering foods to lower cholesterol**

- **Take control of your weight**  
Lose weight slowly and by healthy means (lose no more than ½ to 2 lbs. per week). Losing weight the right way will lower LDL's and triglycerides while raising HDL's.
  1. Women's waist size should be less than 35 inches
  2. Men's waist size should be less than 40 inches
- **Stop smoking**  
According to the National Institute of Health, regardless of present risk factors for heart disease, smokers had a "coronary event" 10 years earlier than non-smokers.
- **Become more physically active**  
One should meet the recommendations of 30 minutes a day of moderately intense physical activity, e.g., brisk walking. Physical activity helps to prevent and control for heart disease related risk factors. Physical activity can help you to lose weight, lower cholesterol, lower blood pressure, control for Type II Diabetes and improve overall health and wellness.

## Resources

American Heart Association  
<http://www.americanheart.org>

National Institute of Health  
<http://www.nih.gov/>

National Heart, Lung and Blood Association  
<http://www.nhlbi.nih.gov/>